# MINI PROJECT

# REPORT ON

# "ONLINE MS-CIT EXAM SYSTEM"

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**Institute of Business Management and Research,**
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**(Affiliated to SPPU & Approved by AICTE)**

**Session: 2021-23**

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# INTRODUCTION

# INTRODUCTION

The Computerization is undergoing a dramatic change at rapid rate. Every field is acquiring Computer System to handle sensitive data and these types of systems are also responding well .Today's environment like Industries, Banks, Hospitals, Shops and Colleges are working with computerization.

This project is developed for "ONLINE EXAM SYSTEM MS-CIT" the information for this project is collected from "Server Computer Gadhinglaj ". The system maintains the record of Students, Teachers, Exam Time Table, Question Bank & their respective sets, Answers , Results of Examination. Our project is based on Network. It consists of distributed network system(Client Server) . For developing this software we have used NetBeans IDE 7.2, GlassFish Server 3.1, SQL.Server side consist of all the administration of Examination i.e Exam Time Table Setting , Question Bank & their sets setting , Client side display the Question Paper to theStudent.

All details are stored in database SQL Server , which is back end. Java &CSS is used as front end .The information stored in Database is used for report generation. This system is specially designed to maintain Exam Time Table & Result information of Students

ONLINE EXAM SYSTEM MS-CIT

# ORGANIZATION PROFILE

| | | |
|---|---|---|
| Organization Name | : | Server Computer Gadhinglaj |
| Venue | : | Gadhinglaj |
| Contact No. | : | 9588484566 |
| Owner | : | Mr. Karambali sir |
| Area Of Work | : | Gadhinglaj |

# ABOUT PROJECT

# ABOUT PROJECT

The project entitled "ONLINE EXAM SYSTEM MS-CIT " for a website program. This project is developed for "Online Exam System MS-CIT" the information for this project is collected from "Server Computer Gadhinglaj".

The information stored Database is used for report generation. Online Examination system helps students to offer a quick and easy way to appear for the test.

It also provides the results immediately after the examination with 100% accuracy and security. Student can enter to perform exam only with their valid username and password. This examination contains multiple choice question and appropriate number of options.

There are no limitations on number of options and it can be randomized so same set of question will not appear to all students so it prevent manipulation.

More than one option can be correct but the user can select only one option. This provides time limit. The user can see their results after completing the exam.

# EXISTING MANUAL SYSTEM

- The existing system work as follows involves many regisister. We have study ASM IBMR college,pune and find existing system is manual entry of up keeping of the details of the student who are registered already. And it is very difficult for each student to come to the exam center.
- It is very difficult to the students from far distance to reach the exam center. This system is required to prepare registration\application form, question paper for the students and required to print a lot of number manually.
- To calculate how many students registered, and verification of details of these students in a month by hand is very difficult. This requires quite a lot of time and wastage of money as it requires quite lot of manpower to dothat.
- Another factor that takes into account that is the possibility of errors. The limitation of existing system is that it is not all personalized. It cannot be used for personal and quick reference. Even the other staff members can make quick entries if the responsible person is not present.

# LIMITATION OF EXISTING MANUAL SYSTEM

- Existing system is completely depend upon manualwork.
- The information is stored in register is not accurate as well as there is various mistake in Examination & Result process ofsystem.
- To store large amount of data more stationary is required which increase the cost of stationary.
- In manual system we can not modify the records and also can’t keep backup of document.

# PROPOSED SYSTEM

The Computerization is undergoing a dramatic change at rapid rate. Every field is acquiring Computer System to handle sensitive data and these types of systems are also responding well.

Today's environment like Industries, Banks, Hospitals, Shops and Colleges are working with computerization.

This project is developed for "ONLINE EXAM SYSTEM MS-CIT" the information for this project is collected from "Server Computer Gadhinglaj ". The system maintains the record of Students, Teachers, Exam Time Table, Question Bank & their respective sets, answers , Results of Examination. Our project is based on Network. It consists of distributed network system(Client Server) . For developing this Website we have used NetBeans IDE 7.2, GlassFish Server 4.1, SQL Server side consist of all the administration of Examination i.e Exam Time Table Setting , Question Bank & their sets setting , Client side display the Question Paper to the Student.

All details are stored in database SQL Server , which is back end. Java & CSS is used as front end .The information stored in Database is used for report generation. This system is specially designed to maintain Examination Time Table & Result information of Students.

# OBJECTIVES OF PROPOSED SYSTEM

- To provide an interface through which student can appear for examination on objective as well as subjective type questions to students done by themselves.
- To not provide facility of copy and paste while attempting the subjective questions on the webpage.
- When the student exam the timer will start automatically and show the student how much time isleft.
- The questions will be randomly from question bank ,checked automatically by the system from the database for subjective answer manually checking by exam department will takeplace.
- To provided you password facility and credentials should be checked properly at the time of login for student, expert, controller and Exam Dept Admin.
- To provide an intent where controller will create new Expert and Admin for Exam Dept .The authority criteria is provided to the controller of examination.
- Time feasibility.
- User Friendly Interface.
- Technical & economical feasibility.

# METHODOLOGY

- We first take decision to make an “ONLINE EXAM SYSTEM MS-CIT”.
- Then we make questionnaires about to get the actual information about the “Online Exam System MS-CIT”.
- We search on net to collect the information.
- After getting all information we make design of “Online Exam System MS-CIT”.
- We get help from staff of Computer Science at coding time of the project.

When whole project is completed we give the demo of the project

# ADVANTAGES OF PROPOSED SYSTEM

1. Program is menu driven and user friendly .An operator with a bit of computer knowledge can handle the system easily.

2. Quick display, modification , Deletion is provided.

3. Student can change his answer within a exam.

4. The data stored in database has full security.

5. The Proposed System is Computerized.

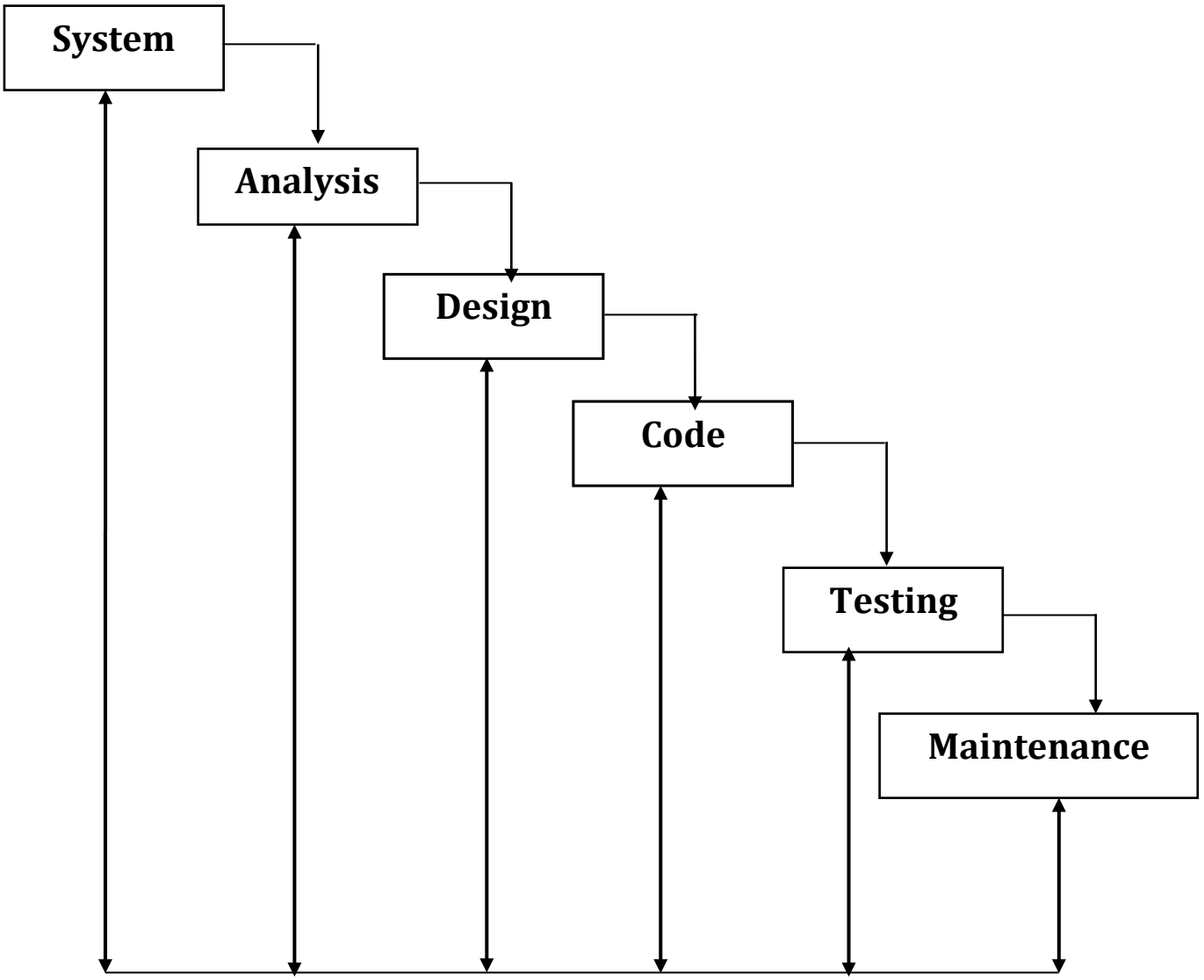
6. This System can be Access

# SYSTEM ANALYSIS

ONLINE EXAM SYSTEM MS-CIT

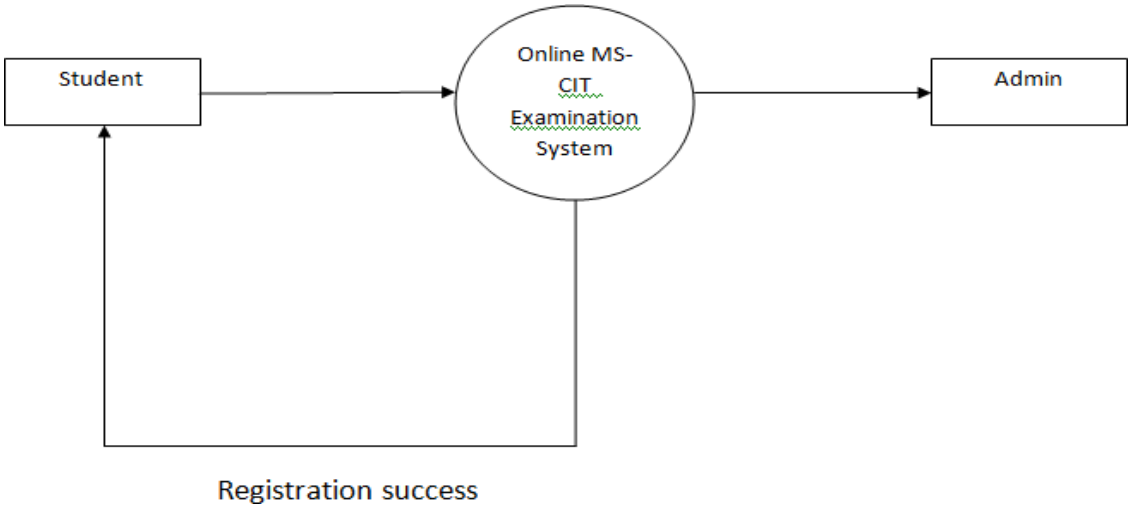
# SYSTEM DEVELOPMENT LIFE CYCLE

**The process model used for this system "classic life cycle" as this is simple and is best for small scale project.**

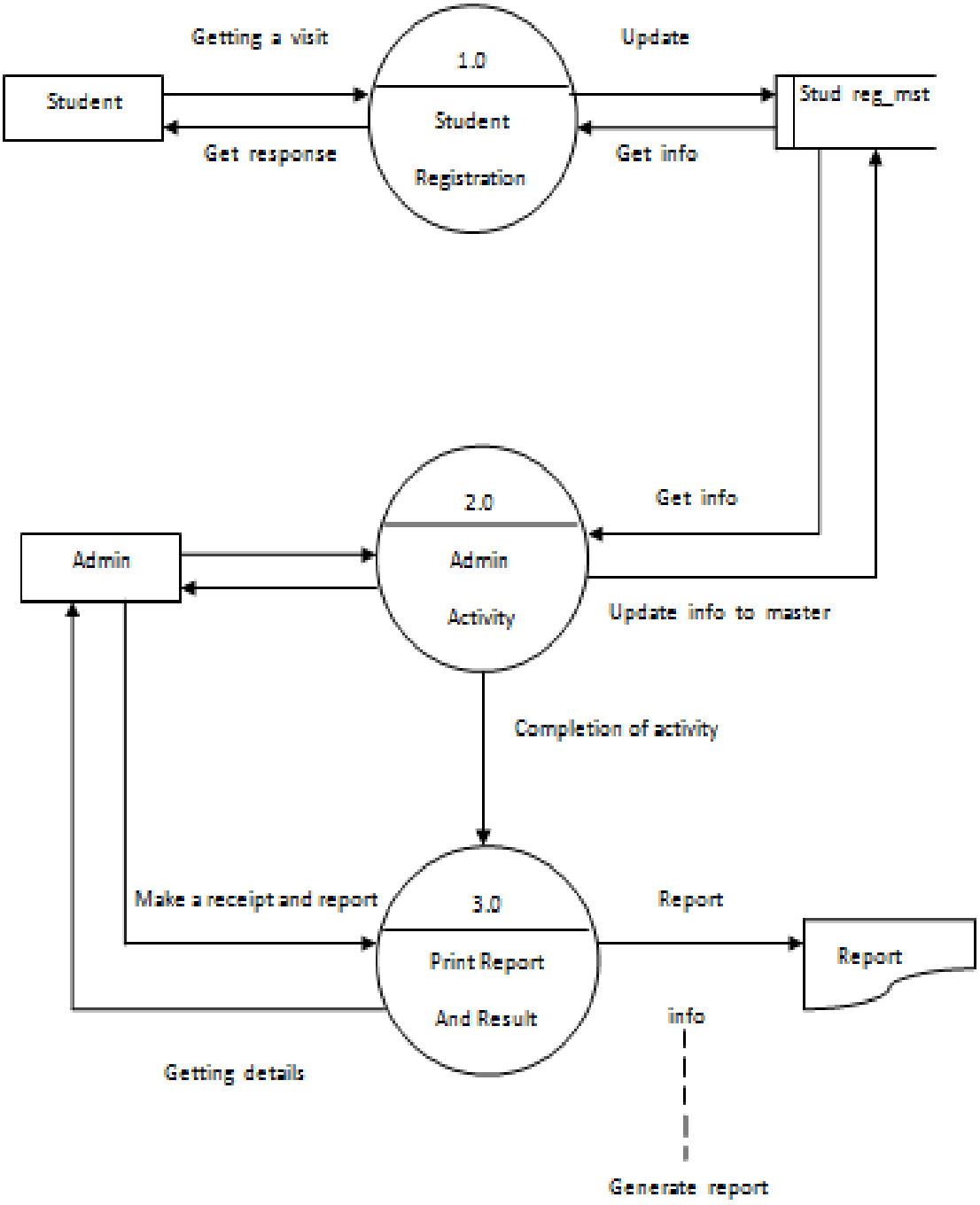


# DATA FLOW DIAGRAM (DFD)

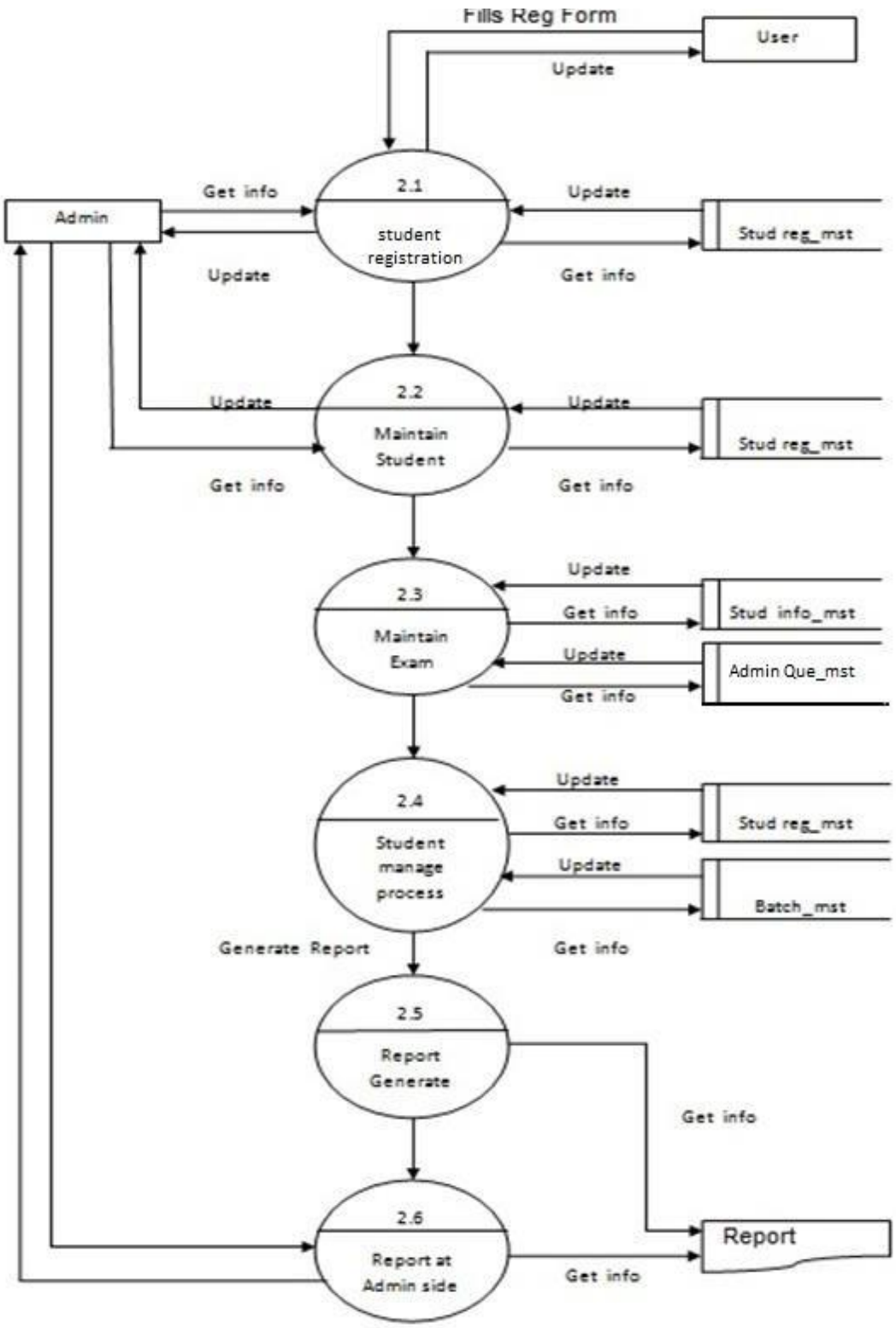
# 0TH LEVEL DFD



# 1ST LEVEL DFD-

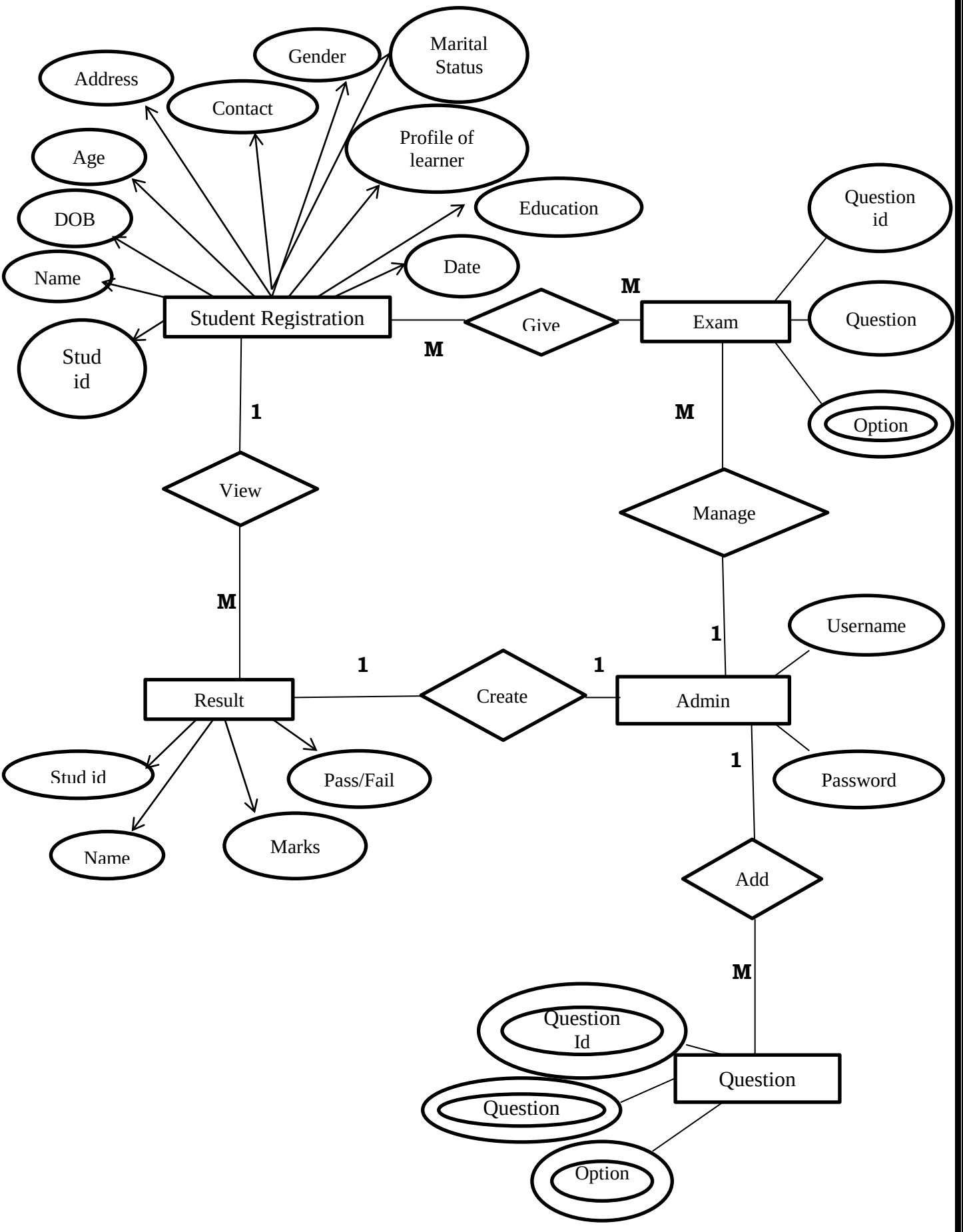


## 2ND LEVEL DFD-



# ENTITY RELATIONSHIP DIAGRAM (ERD)

# E-R-DIAGRAM


Address
Gender
Marital Status
Contact
Profile of learner
Age
DOB
Education
Name
Date
Student Registration
Give
Exam
Question id
Question
Option
Stud id
M
1
M
M
View
Manage
M
1
Username
1
1
Result
Create
Admin
Stud id
Pass/Fail
1
Password
Name
Marks
Add
M
Question Id
Question
Question
Option

# SYSTEM REQUIREMENT

# SYSTEM REQUIREMENT

To run the software we must have certain hardware & software installed on our computer. The minimum system requirements includes:-

**Software Requirement:**

- Net Beans IDE 7.2
- Glass Fish Server 3.1.0
- Jasper Report 5.1

**Operating System -**

- Windows 7 64 bit
- Windows 8 64 bit
- Windows 10 64 bit

**Hardware Requirements -**

- 2GB of RAM orMore
- 20GB of HardDisk
- 1 Keyboard, 1Mouse

**Front End:**

**Java , CSS.**

**Back End :**

**SQL server.**

# ABOUT JAVA

ONLINE EXAM SYSTEM MS-CIT

# ABOUT JAVA

- First of all java is an open source programming language created by Sun Microsystems overtaken by oracle .Its source code is available for free inside every JDK ( Java Development Kit)
- Java is a platform Independent: – Platform independent means java can run on any computer irrespective to the hardware and software dependency. Means Java does not depend on hardware means what type of processor, RAM etc. Java will run on a machine which will satisfy its basic needs.
- Java is a Secure Language.

ONLINE EXAM SYSTEM MS-CIT

# WHAT'S NEW IN JAVA?

The Byte Code Concept separates java from all other language. As we know Byte Code is set of symbols created by sun Microsystems which are generated after the compilation of Program. This byte code is actually encoded source code that human cannot understand and that Byte code is converted to machine code by Java Runtime Environment. This Byte code is executed by java runtime environment which consist of Byte code loader which loads the byte code into memory and then Byte code verifier which verifies the Byte code and look for any extra symbols and code which does not resembles to the standards and throws unexpected code way and makes java byte code error free and secure.

Java is fast because of JIT compiler. Just In Time compiler stores the repeated code in its cache memory and in byte code where repeated code is used, instead of loading that code again from memory JIT use it from its cache memory and safe time and space and make execution fast. Below is the graphical representation of java program.

"Write Once, Run Anywhere" (WORA) is the famous tag line of java and yes it is very true this all is possible because of Byte code as once byte code is generated you can use that byte code and can run that program in any operating system, every operating system's java runtime environment will convert that Byte Code into machine code and will give you your require output and because of this Java Byte Code is named as Portable Code or P-code.

Due to its Byte code is in Bytes, java program takes very less memory on hard disk and therefore java technology is Portable also. (Byte code concept)

The Above features cannot be found in any other language, because of the above features java is used almost everywhere and in every application no matter its mobile application or web. Till date there is no programming language more secure than java.

# ABOUT SQL DATABASE

# WHAT IS DATABASE?

A database is a separate application that stores a collection of data. Each database has one or more distinct Application for creating, accessing managing, searching and replicating the data it holds.

Other kinds of data stores can be used such as files on the file system or large hash tables in memory but data fetching and writing would not be fast and easy with those types of systems.

So nowadays we use relational database management systems (RDBMS) TO store and manage huge volume of data. This is called relational database because all the data is stored into different bales and relations are established using primary keys or other keys known as foreign keys.

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# SQL DATABASE

SQL Server is Microsoft's relational database management system (RDBMS). It is a full-featured database primarily designed to compete against competitors Oracle Database (DB) and SQL.

Like all major RBDMS, SQL Server supports ANSI SQL, the standard SQL language. However, SQL Server also contains T-SQL, its own SQL implementation. SQL Server Management Studio (SSMS) (previously known as Enterprise Manager) is SQL Server's main interface tool, and it supports 32-bit and 64-bit environments. SQL Server is sometimes referred to as MSSQL and Microsoft SQL Server.

Originally released in 1989 as version 1.0 by Microsoft, in conjunction with Sybase, SQL Server and its early versions were very similar to Sybase. However, the Microsoft-Sybase partnership dissolved in the early 1990s, and Microsoft retained the rights to the SQL Server trade name. Since then, Microsoft has released 2000, 2005, 2008 and 2014 versions, which feature more advanced options and better security.

SQL Server is offered in several editions with different feature set and pricing options to meet a variety of user needs, including the following:

- **Enterprise:** Designed for large enterprises with complex data requirements, data warehousing and Web-enabled databases. Has all the features of SQL Server, and its license pricing is the most expensive.
- **Standard:** Targeted toward small and medium organizations. Also supports e-commerce and data warehousing.
- **Workgroup:** For small organizations. No size or user limits and may be used as the backend database for small Web servers or branch offices.
- **Express:** Free for distribution. Has the fewest number of features and limits database size and users. May be used as a replacement for an Access data.

# DATABASE DESIGN

| Sr No. | Table Name | Description |
|---|---|---|
| **1** | Student Signup | This table contains less information of student |
| **2** | Admin Signup | This table contains details of Admin |
| **3** | Student Registration | This table contains details of details of Student |
| **4** | Student Question Paper | This table contains Student Question Paper |
| **5** | Student Marks | This table contains details of marks |
| **6** | Feedback | This table contains feedback |
| **7** | Admin Question Paper | This table contains Questions at Admin side |

## 1. SIGN UP TABLE –

| No | Field Name | Data type | Size | Constraint |
|---|---|---|---|---|
| 1 | sid | int | - | Primary Key |
| 2 | Full_Name | nvarchar | 80 | Not null |
| 3 | Address | nvarchar | 100 | Not null |
| 4 | Gender | nvarchar | 30 | Not null |
| 5 | Email_id | nvarchar | 80 | Not null |
| 6 | Password | nvarchar | 80 | Not null |

## 2. ADMIN SIGNUP –

| No | Field Name | Data type | Size | Constraint |
|---|---|---|---|---|
| 1 | aid | int | - | Primary Key |
| 2 | Admin_Name | nvarchar | 50 | Not null |
| 3 | Email_id | nvarchar | 50 | Not null |
| 4 | Password | nvarchar | 50 | Not null |
| 5 | Contact_No | numeric | (18,0) | Not null |

## 3.STUDENT REGISTRATION-

| No | Field Name | Data type | Size | Constraint |
|---|---|---|---|---|
| 1 | Registration_No | Int | - | Primary Key |
| 2 | Full_Name | Nvarchar | 50 | Not null |
| 3 | Address | Nvarchar | 100 | Not null |
| 4 | DOB | Date | - | Not null |
| 5 | Age | Int | - | Not null |
| 6 | Gender | Nvarchar | 30 | Not null |
| 7 | Contact_No | Numeric | (18,0) | Not null |
| 8 | Email_id | Nvarchar | 80 | Not null |
| 9 | Marital_Status | Nvarchar | 80 | Not null |
| 10 | Education_Profile | Nvarchar | 80 | Not null |
| 11 | Date | Date | - | Not null |

## 4.STUDENT QUESTION PAPER-

| No | Field Name | Data type | Size | Constraint |
|---|---|---|---|---|
| 1 | Question_No | Int | - | Primary Key |
| 2 | Question | nvarchar | 100 | Not null |
| 3 | Answer | nvarchar | 80 | Not null |
| 4 | Marks | nvarchar | 70 | Not null |
| 5 | User_Name | nvarchar | 50 | Not null |
| 6 | pass | nvarchar | 50 | Not null |
| 7 | Selected _answer | nvarchar | 50 | Not null |

## 5. STUDENT MARKS-

| No | Field Name | Data type | Size | Constraint |
|---|---|---|---|---|
| 1 | sid | int | - | Not null |
| 2 | Question_No | int | - | Not null |
| 3 | Question | nvarchar | 200 | Not null |
| 4 | Option | nvarchar | 50 | Not null |
| 5 | Answer | nvarchar | 50 | Not null |
| 6 | Marks | int | - | Not null |

## 6. FEEDBACK-

| No | Field Name | Data type | Size | Constraint |
|---|---|---|---|---|
| 1 | uid | int | - | Primary Key |
| 2 | Name | nvarchar | 80 | Not null |
| 3 | Contact_No | numeric | (18,0) | Not null |
| 4 | Message | nvarchar | 100 | Not null |

## 7. ADMIN QUESTION PAPER

| No | Field Name | Data type | Size | Constraint |
|---|---|---|---|---|
| 1 | Question_No | Int | - | Primary Key |
| 2 | Question | nvarchar | 100 | Not null |
| 3 | Option1 | nvarchar | 80 | Not null |
| 4 | Option2 | nvarchar | 80 | Not null |
| 5 | Option3 | nvarchar | 80 | Not null |
| 6 | Option4 | nvarchar | 80 | Not null |
| 7 | Answer | nvarchar | 80 | Not null |

ONLINE EXAM SYSTEM MS-CIT

# SOURCE CODE

ONLINE EXAM SYSTEM MS-CIT

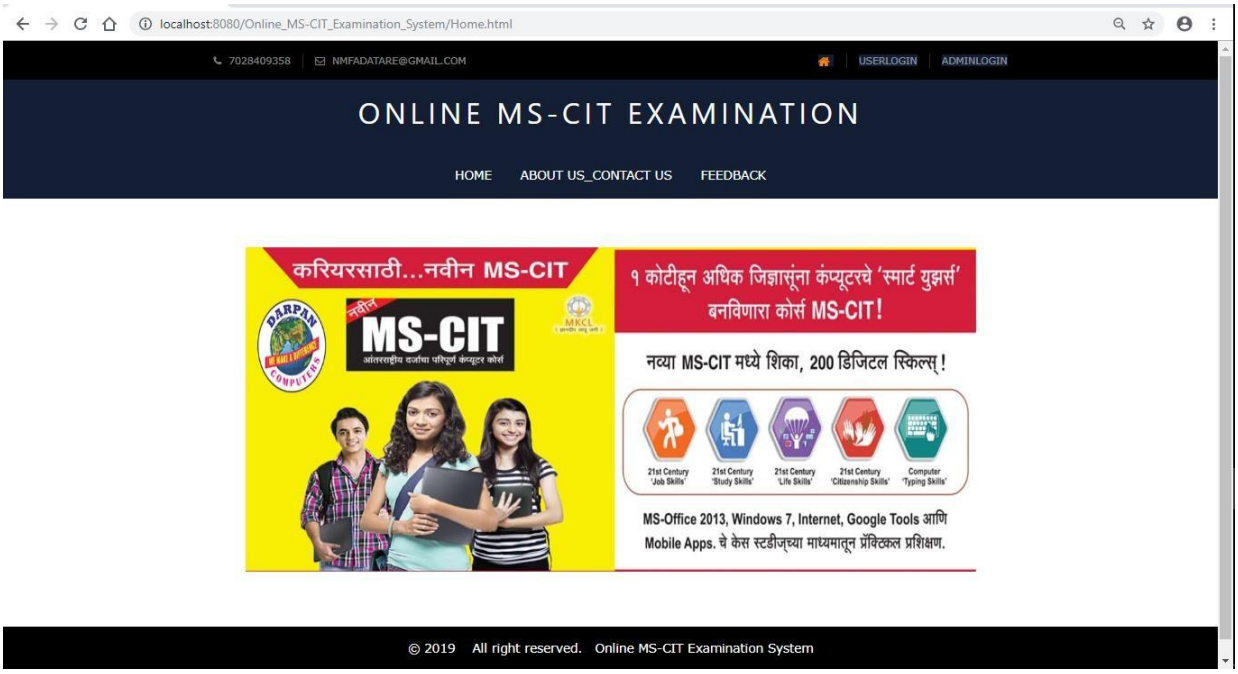
```
<%--
    Document   : admin_login
    Created on : Nov 22, 2018, 3:44:01 PM
    Author     : Ramanand
--%>

<%@page contentType="text/html" pageEncoding="UTF-8"%>
<!DOCTYPE html>
<html>
<head>
<meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
<title>JSP Page</title>
<link rel="stylesheet" href="admin_login.css">
<link rel="stylesheet" href="bootstrap.css">

<link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/css/bootstrap.min.css">
<script src="https://ajax.googleapis.com/ajax/libs/jquery/3.3.1/jquery.min.js"></script>
<script src="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/js/bootstrap.min.js"></script>


</head>
<body style="background-color:orange">


<%@include file="Home_master.html" %>
<br><br><br><br>
<div class="divleft">
<div class="login-box" style="">
<imgsrc="avatar.png" class="avatar" style="">
<h1>Admin Login</h1>
<form name="admin_login" action="admin_login" method="post">

<%--   <div class="input-group">
<span class="input-group-addon"><i class="glyphiconglyphicon-user"></i></span>

<input type="text" name="username" placeholder="Enter Username" style="height:10px; width:150px"
onkeypress="javascript:returnisAlphanumeric(event)">
</div>--%>
<div class="col-sm-6">
<div class="input-group">
<span class="input-group-addon"><i class="glyphiconglyphicon-user"></i></span>
<input type="uname" name="txt_uname" onkeypress="javascript:returnisString(event)" placeholder="Admin Id"
class="form-control" style="height:30px; width:200px ">

</div>
</div>
<br>

<%-- <p>Password</p>

<input type="password" name="password" placeholder="Enter Password"
```

ONLINE EXAM SYSTEM MS-CIT

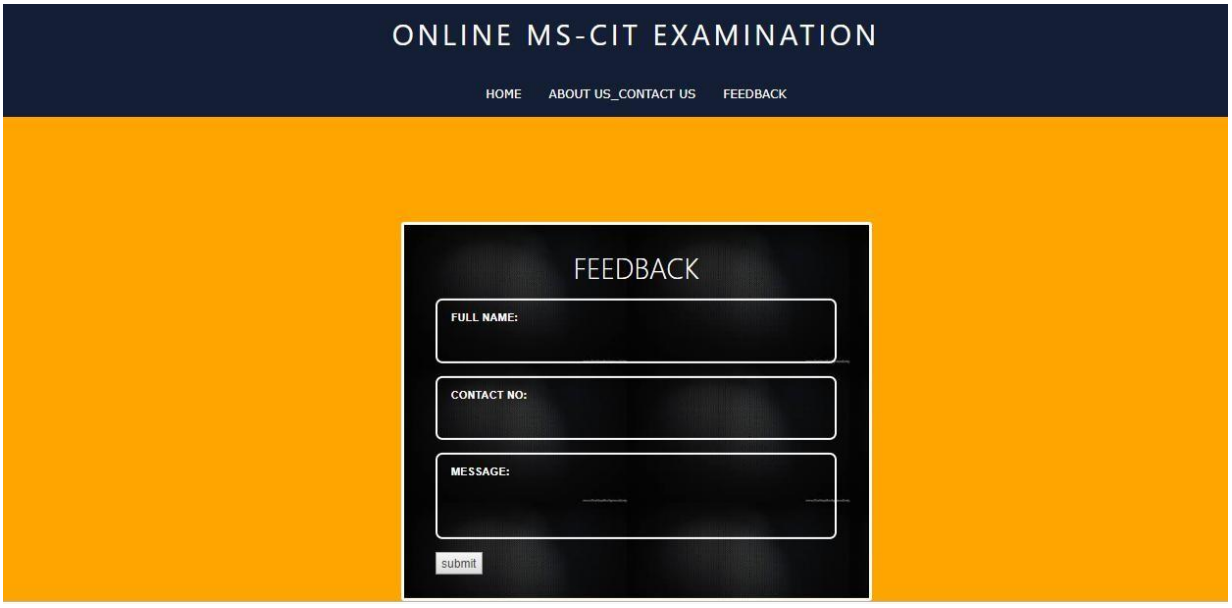
```
onkeypress="javascript:returnisAlphanumeric(event)">--%>
<br>
<br>
<div class="col-sm-6">
<div class="input-group">
<span class="input-group-addon"><i class="glyphiconglyphicon-lock"></i></span>
<input type="password" name="pass" onkeypress="javascript:returnisAlphanumeric(event)" placeholder="Password"
class="form-control" style="height:30px; width:200px ">
</div>
</div>
<br>
<br>
<br>
<div class="clo-sm-2"></div>
<div class="col-sm-3">
<%-- <input type="submit" name="txt_btnsave" class="btnbtn-info" value="Login">--%>
<a href="admin_question_paper.jsp" name="txt_btnsave" class="btnbtn-info" style="height: 40px;width: 100px;font-
size:8px">Login</a>
</div>
<div class="col-sm-3"></div>
<div class="clo-sm-4">
<a href="admin_signup.jsp" name="txt_btnsave" class="btnbtn-info" style="height: 40px;width: 100px;font-
size:8px">create account</a>
</div>
<br>
<a href="forget_password.jsp">Forget Password</a>
</form>
</body>
</html>
```

# OUTPUT DESIGN

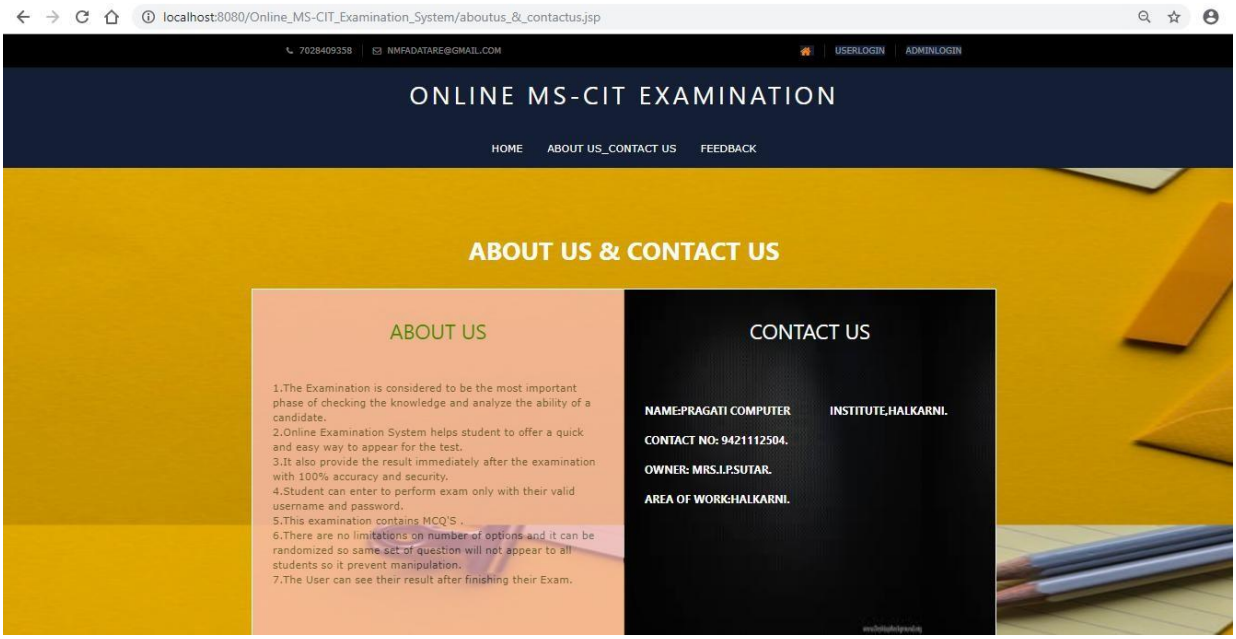
# Home Page –



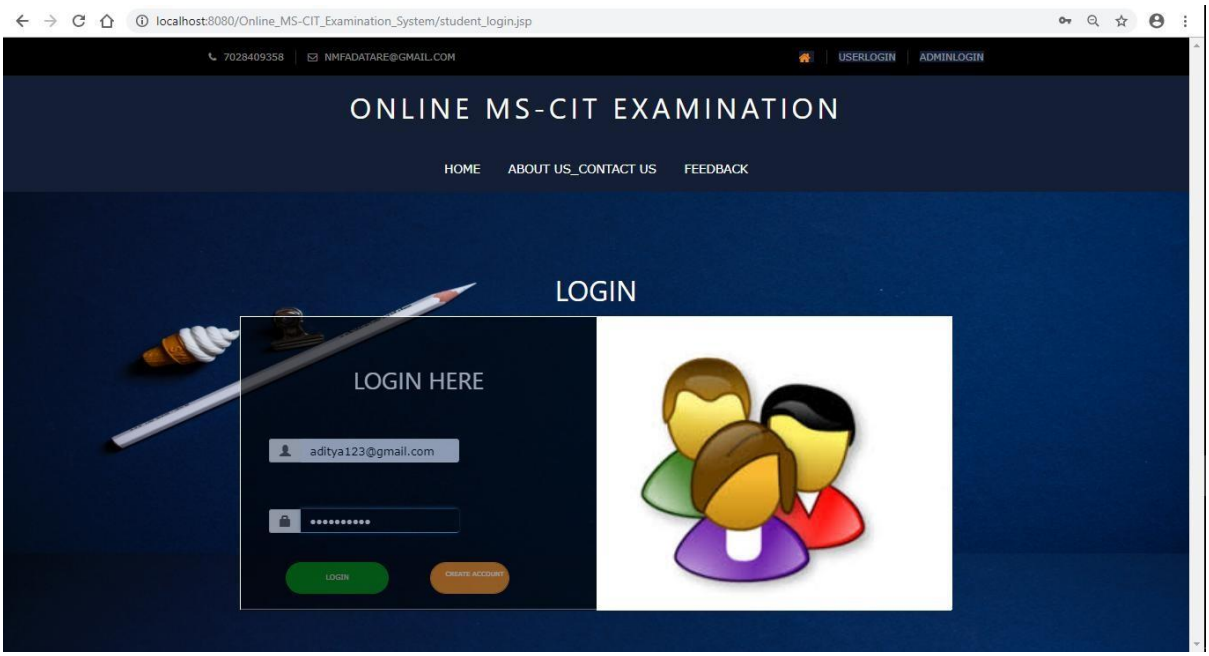

# Feedback Page -



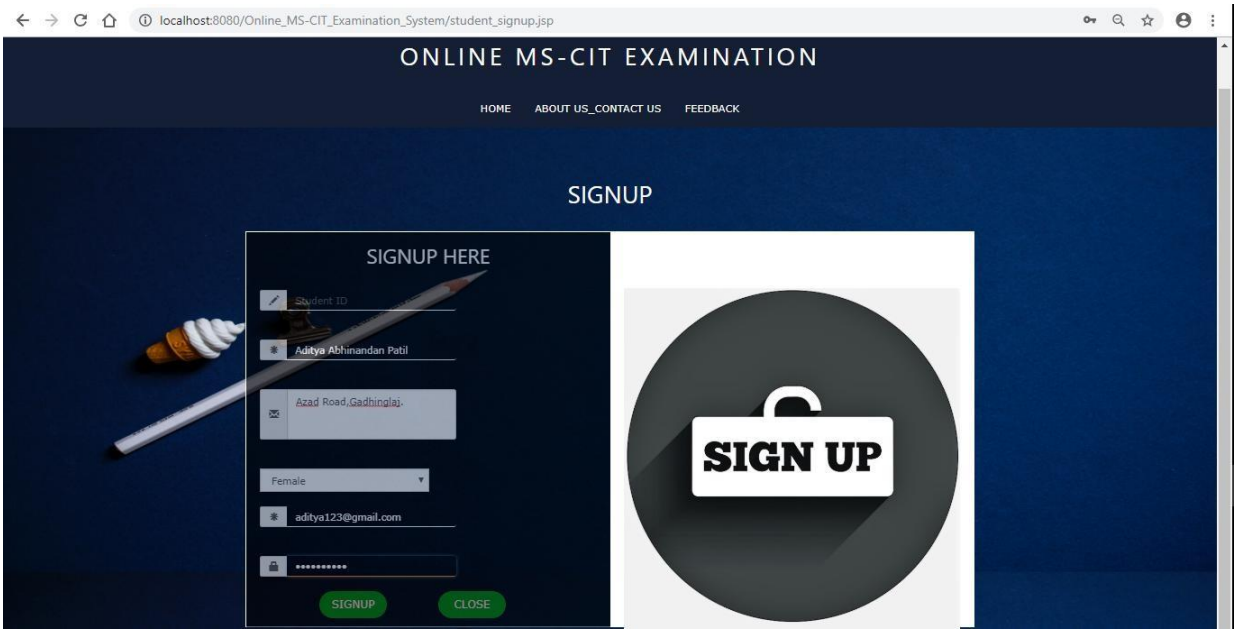
# About Us Page -



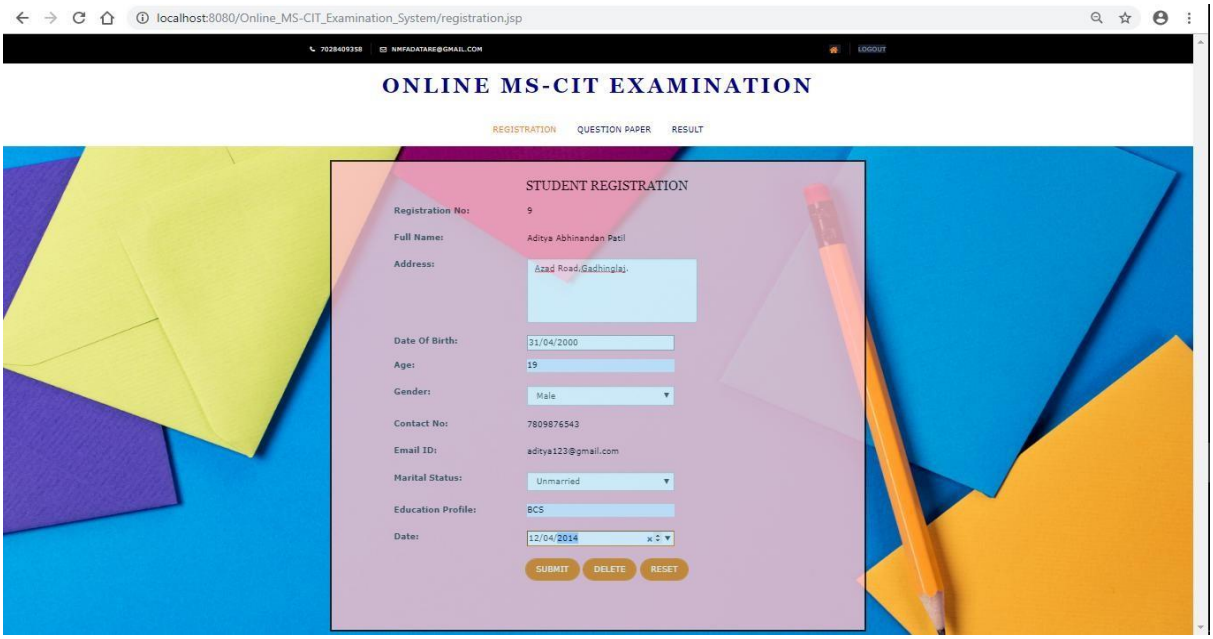

# Student Login –



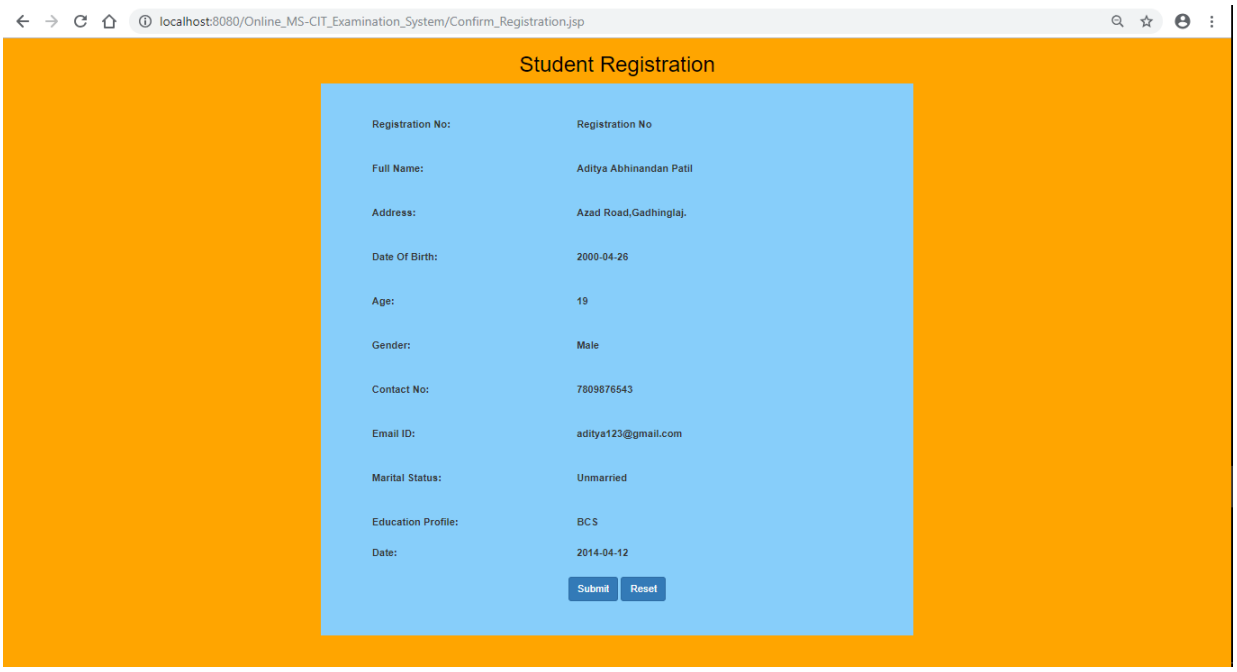
# Student Sign Up Page –



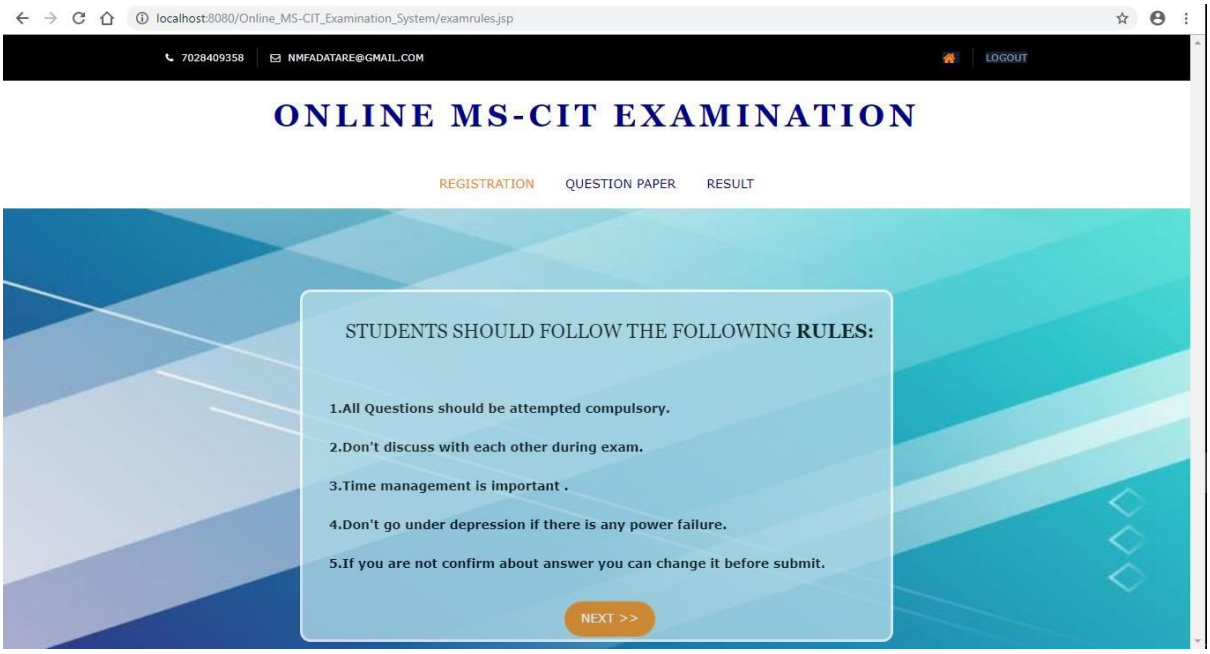

# Student Registration Page –



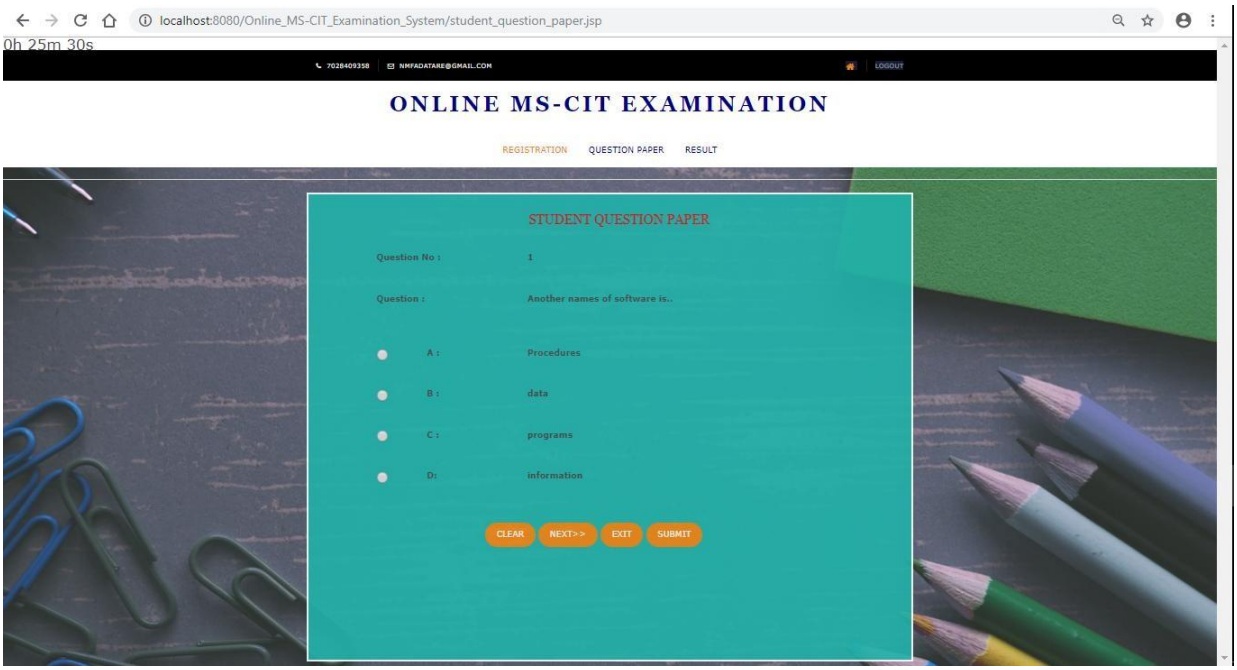
# Confirm Registration Page –



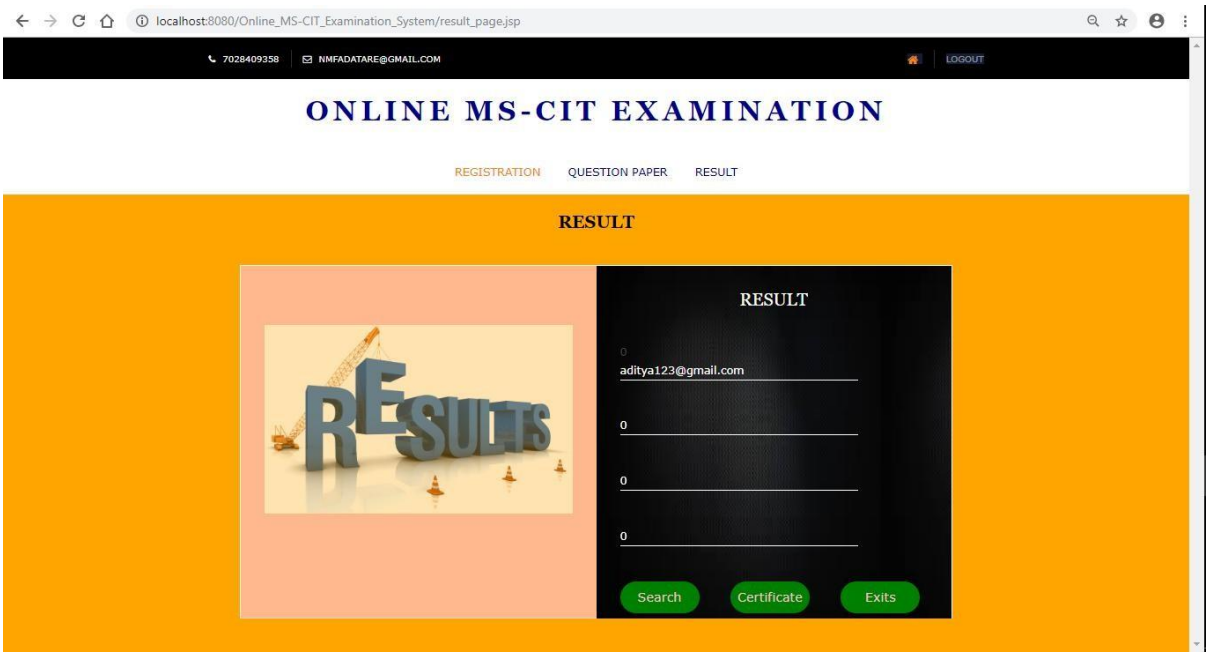

# Exam Rules Page -



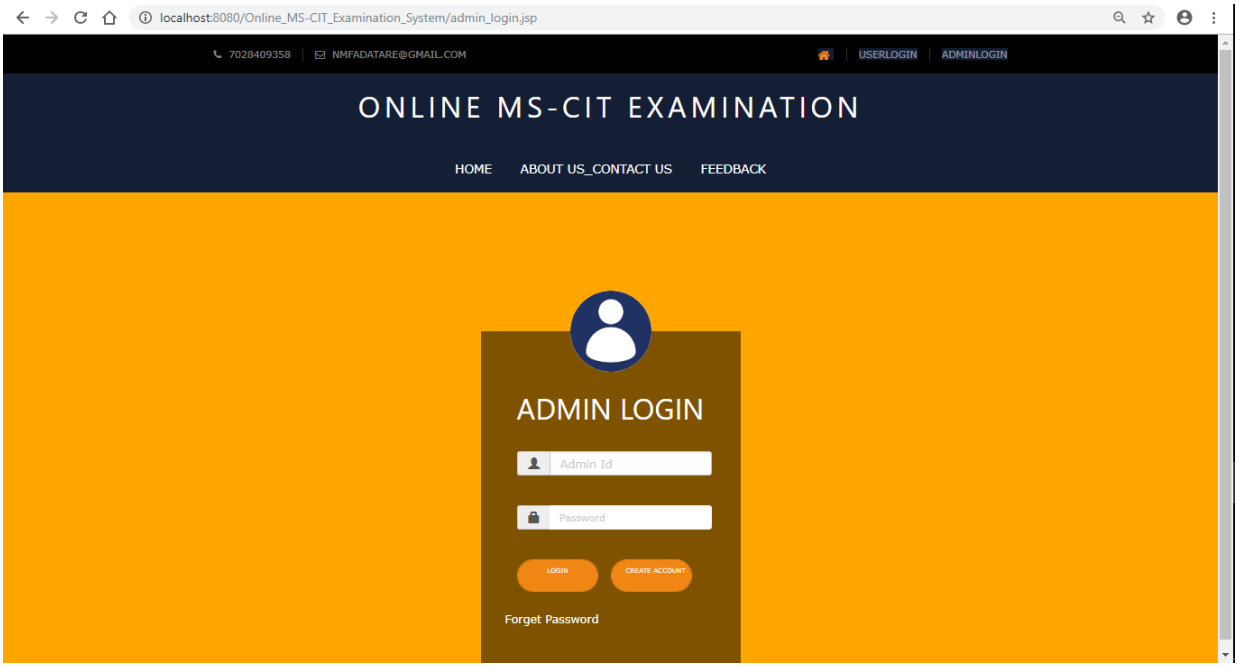
# Student Question Paper Page -



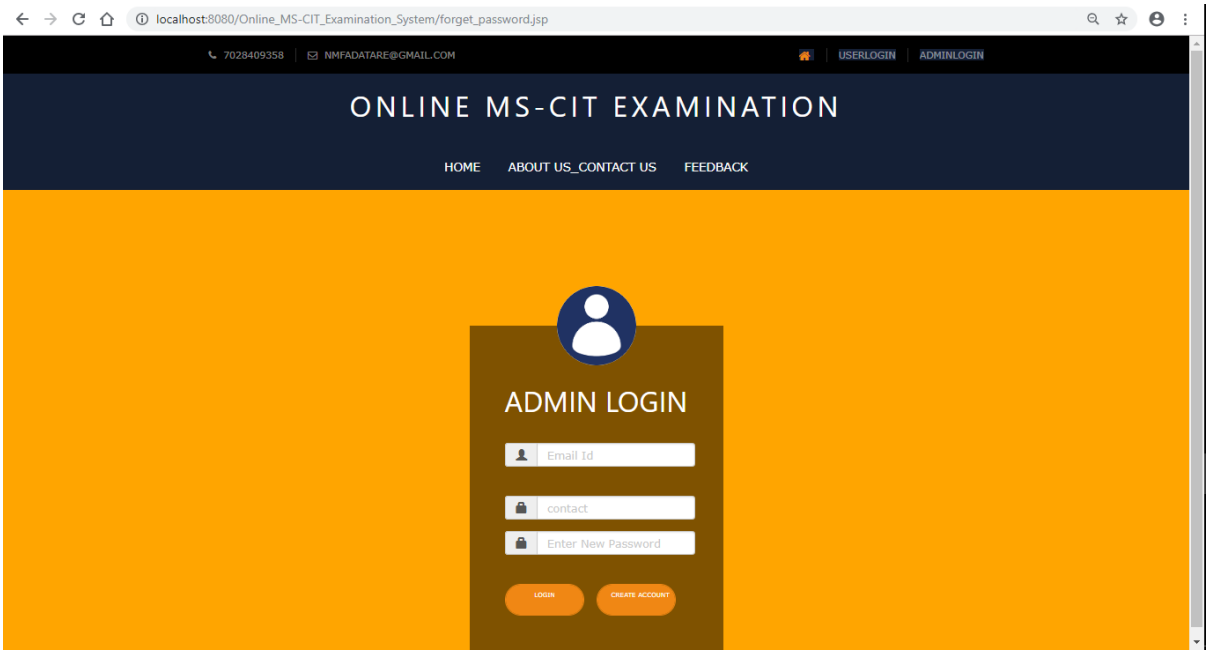

# Student Result Page -



# Admin Login Page –

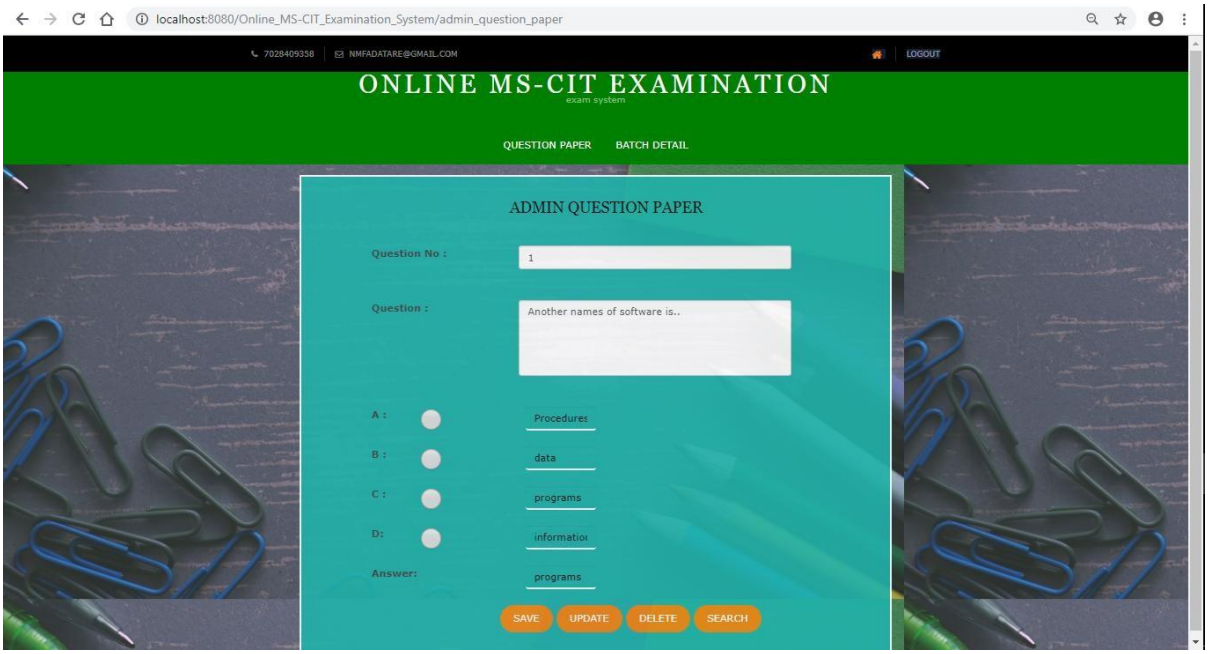



# Forget Password Page-

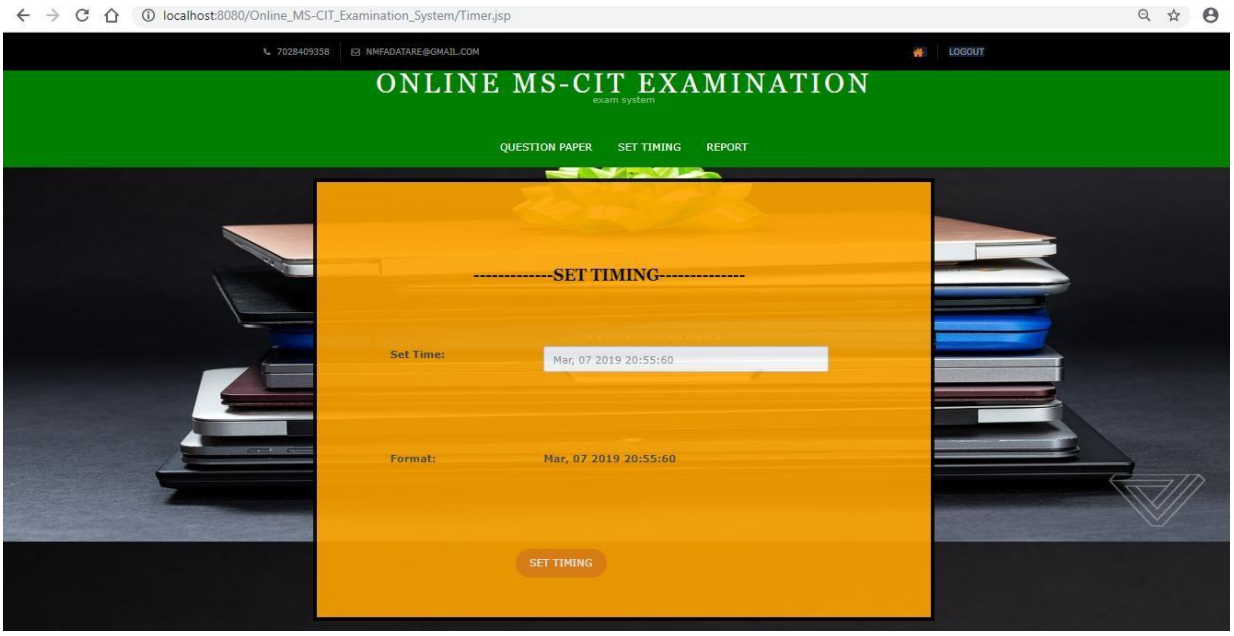


## Admin Sign Up Page –

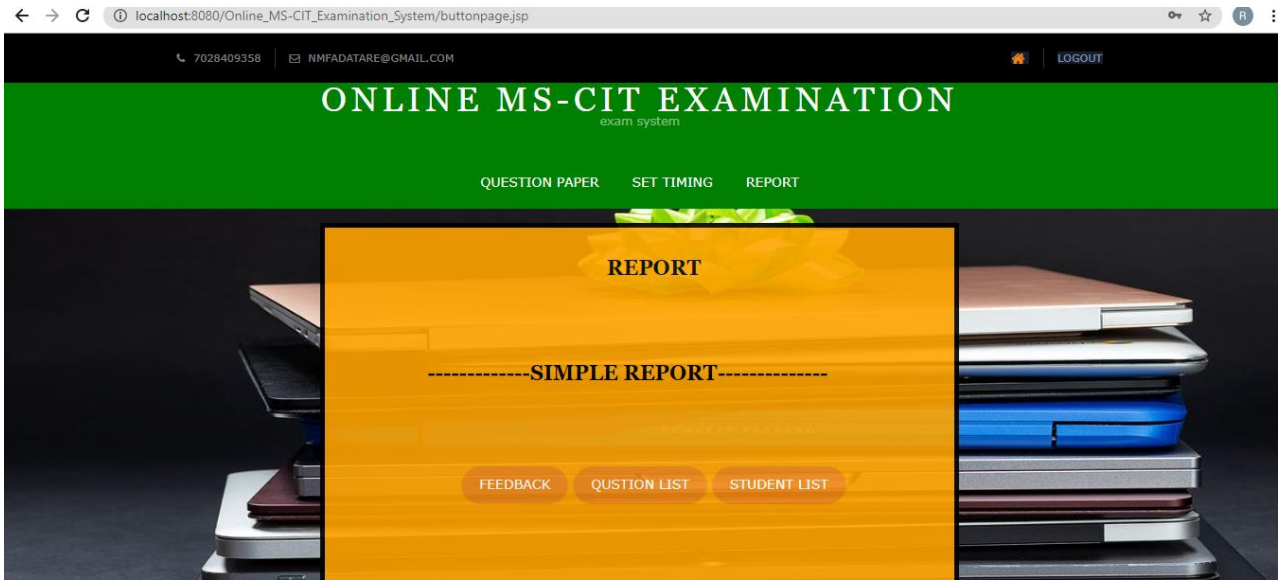
## Admin Question Paper Page-



## Timer Page-

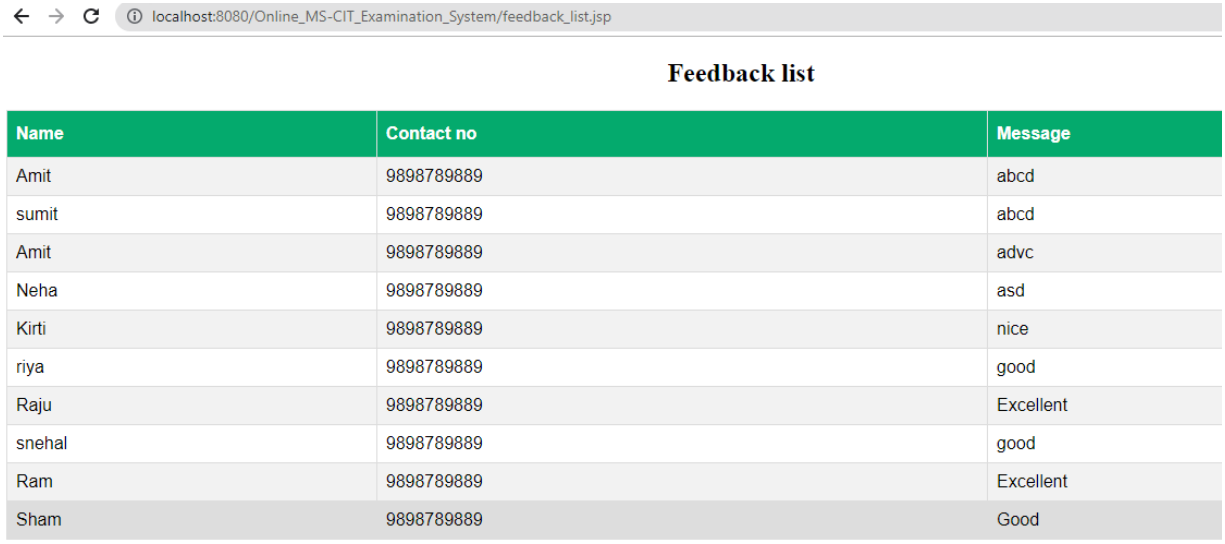



## Button Page-



# REPORTS

# 1. FEEDBACK REPORT



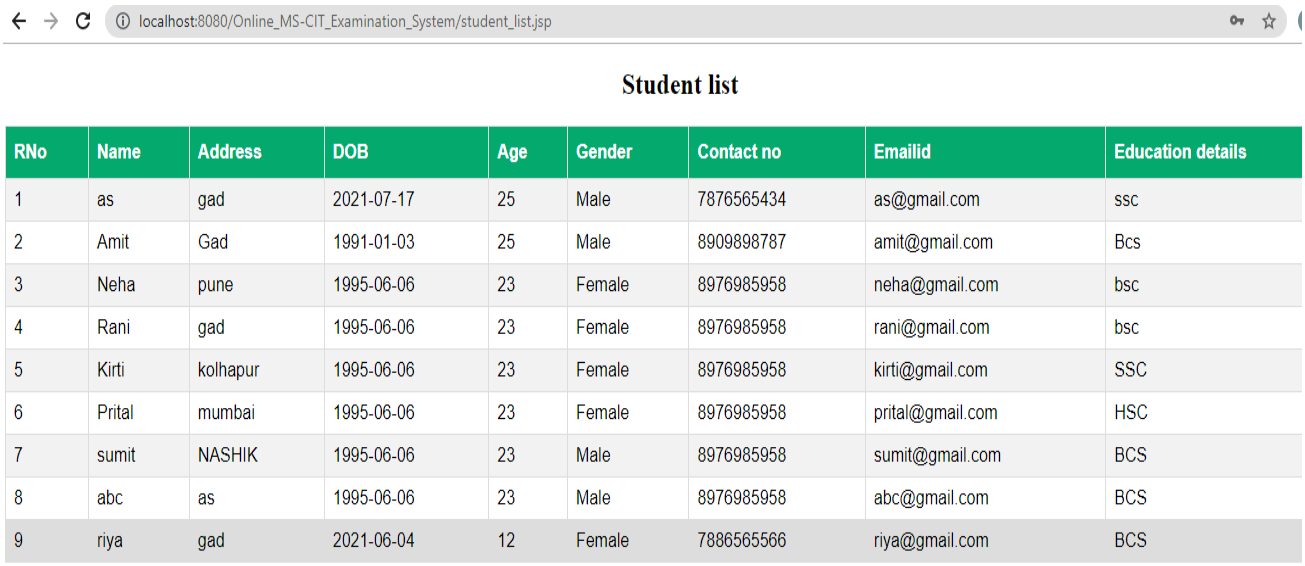

| Name | Contact no | Message |
|---|---|---|
| Amit | 9898789889 | abcd |
| sumit | 9898789889 | abcd |
| Amit | 9898789889 | advc |
| Neha | 9898789889 | asd |
| Kirti | 9898789889 | nice |
| riya | 9898789889 | good |
| Raju | 9898789889 | Excellent |
| snehal | 9898789889 | good |
| Ram | 9898789889 | Excellent |
| Sham | 9898789889 | Good |

# 2. QUESTION REPORT

**Qustion list**

| Qustion No | Qustion | Option 1 | Option 2 | Option 3 | Option 4 | Answer |
|---|---|---|---|---|---|---|
| 4 | The .....perform simple math for the CPU. | ALU | CU | MU | NONE | ALU |
| 5 | A CD-RW disk..... | CD-Rewritable | CD-Recortable | CD-Rom | CD-Rotate | CD-CD-Rewritable |
| 6 | Starting or restarting a computer is called ----- the system. | Coping | pasting | multitasking | NONE | NONE |
| 7 | --- is the most widely used operating system | Windows XP | UNIX | Mac-OS | LINUX | Windows XP |
| 10 | Starting or restarting a computer is called ----- the system. | Coping | pasting | multitasking | NONE | NONE |
| 11 | _____ is controlled by a mouse and changes shape depending upon itscurrent function. | ICON | Menus | Help | Pointer | Pointer |
| 12 | ---- is the most widely used operating system. | Windows XP | UNIX | Mac-OS | LINUX | Windows XP |
| 13 | A CD-RW disk..... | CD-Rewritable | CD-Recortable | CD-Rom | CD-Rotate | CD-CD-Rewritable |
| 14 | ---- is the most widely used operating system. | Windows XP | UNIX | Mac-OS | LINUX | Windows XP |
| 15 | Starting or restarting a computer is called ----- the system. | Coping | pasting | multitasking | NONE | NONE |
| 16 | _____ is controlled by a mouse and changes shape depending upon itscurrent function | ICON | Menus | Help | Pointer | Pointer |
| 17 | --- is the most widely used operating system. | Windows XP | UNIX | Mac-OS | LINUX | Windows XP |
| 18 | A CD-RW DISK..... | CD-Rewritable | CD-Recortable | CD-Rom | CD-Rotate | CD-Rewritable |

# 3. STUDENT REPORT




| RNo | Name | Address | DOB | Age | Gender | Contact no | Emailid | Education details |
|---|---|---|---|---|---|---|---|---|
| 1 | as | gad | 2021-07-17 | 25 | Male | 7876565434 | as@gmail.com | ssc |
| 2 | Amit | Gad | 1991-01-03 | 25 | Male | 8909898787 | amit@gmail.com | Bcs |
| 3 | Neha | pune | 1995-06-06 | 23 | Female | 8976985958 | neha@gmail.com | bsc |
| 4 | Rani | gad | 1995-06-06 | 23 | Female | 8976985958 | rani@gmail.com | bsc |
| 5 | Kirti | kolhapur | 1995-06-06 | 23 | Female | 8976985958 | kirti@gmail.com | SSC |
| 6 | Prital | mumbai | 1995-06-06 | 23 | Female | 8976985958 | prital@gmail.com | HSC |
| 7 | sumit | NASHIK | 1995-06-06 | 23 | Male | 8976985958 | sumit@gmail.com | BCS |
| 8 | abc | as | 1995-06-06 | 23 | Male | 8976985958 | abc@gmail.com | BCS |
| 9 | riya | gad | 2021-06-04 | 12 | Female | 7886565566 | riya@gmail.com | BCS |

# CONCLUSION

After designing and implementation of this system we have come to the following **conclusion:**

i. Due to computerization we can easily update, deletes or insert the data of customer and hence retrieval of any record that is stored becomes easier.

ii. Due to computerization, a lot of time is saved because all the paper work can be done on computer with greater accuracy.

iii. Changes can be made immediately and efficiently as were quire.

iv. print-out of updated records can be taken.

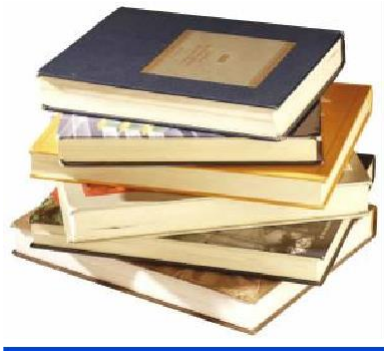
v. Due to computerization department can maintain information of customer organization easily in the computer it self .

- **Suggestion:**

To overcome the limitation of the system there are some suggestions-

1. For customer information & according addition of new module is required.
2. For better accuracy, correctly inputting data is required.

# BIBLIOGRAPHY



## *WEBSITE:

www.Google.co.in

www.slideshare.net